

CONTROL UNIT AR.01



**RESISTANCE WELDING
CONTROL UNIT
AR.01**



Specifically developed for industrial applications, the new entry-level AR.01 control unit relies on the extensive know-how of ARO, a leader in resistance welding for more than 50 years.

With the experience gained from tens of thousands of welding controls installed worldwide, ARO has succeeded in meeting your most demanding needs in an affordable, yet comprehensive unit.

SIMPLICITY AND EASE OF USE

The AR.01 control unit combines straightforward programming with extensive capabilities, **to consistently achieve optimal welding results.**



Programming could not be easier :

- 1 Select the parameter
- 2 Choose the proper value
- 3 Weld (program validation is automatic)

This visual programming avoids confusion and mistakes, thus time and productivity losses. In addition, the actual welding current is proportional to the request, simplifying the search for proper settings.

Weld parameters

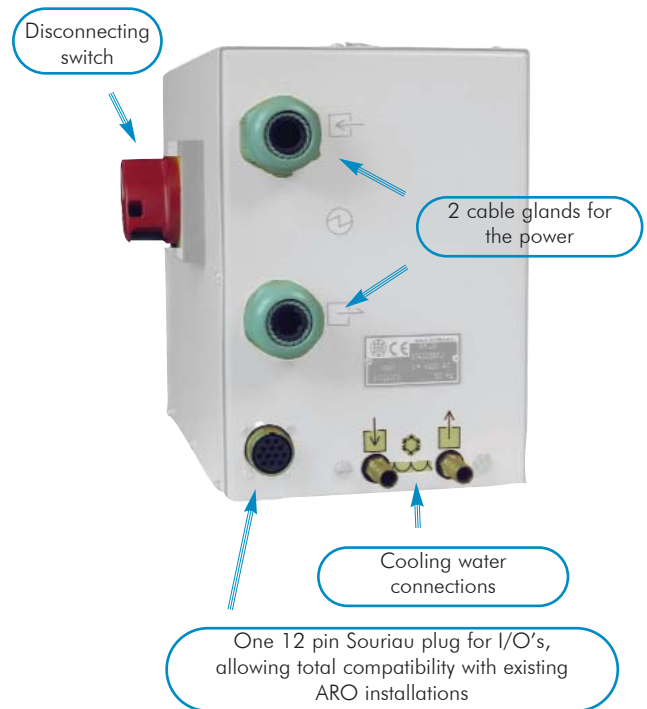
squeeze time	0 - 99 periods
welding time	0 - 99 periods
weld current	10 - 99% (linear)
hold time	0 - 99 periods
off time	0 - 99 periods
upslope	0 - 40 periods
pulses	1 - 20
cold time between pulses	0 - 99 periods

- Mode without current : selection on gun or machine
- Squeeze without welding : selection on gun or machine
- Welding mode : single spot or continuous

FAST AND EASY INSTALLATION

The compact design (small footprint ; all connections grouped on the back of the unit) simplifies the installation.

- 2 models, 32 and 56 kVA at 50% duty cycle, share the same user interface, as well as most components, therefore **simplifying maintenance** and reducing spare parts inventory.
- With anti-vibration rubber feet, a transport handle, and an optional side mounting kit, **installation** is almost **universal**.
- Both 24 VDC and VAC electrovalves are supported.
- Despite reduced dimensions, access into the case is comfortable for **fast maintenance**.
- An optional front window with key lock provides for **increased protection** and **controlled access to programming**.



A COMPLETE AND ROBUST EQUIPMENT

As always, ARO has given particular consideration to **quality** and **reliability**, in order to give you the best return on investment. Each component has been carefully selected to provide maximum performance at the correct cost, and the resulting control unit responds to your most demanding needs:

Features	Benefits
CE mark	Correct operation even in disturbed environment (EMC) Guarantee of electrical safety
IP54 sealing (protection against dust and water projections in all directions)	Correct operation in practically any environment Long operating life
Integrated disconnecting switch	Conforms with European standards (89/392/EEC modified)
Integrated earth leakage circuit breaker *	User safety
Programmable phase angle (φ_e)	Correct welding even for difficult cases such as welding concrete reinforcement
Programmable asymmetrical angle	Correct welding even on large machines (prevents saturation of wound core transformer)
Polyester front panel	Long operating life
Opening the cabinet is possible only when the power switch is OFF	User safety
Microprocessor control and premium quality thyristors	Consistent and reproducible weld quality

* A version without ELCB is also available

SPECIFICATIONS

Power supply	Voltage	230 or 400 or 460 VAC + 10%/-15% single phase
	Frequency	50 / 60 Hz
Power at 50%	Model A	32 kVA under 400 V (or 18 kVA under 230V)
	Model B	56 kVA under 400 V (or 32 kVA under 230V)
Disconnect switch and ELCB	Model A	63 A - 400 V - 30 mA/40 ms
	Model B	100 A - 400 V - 30 mA/40 ms
Operating conditions	Temperature	0 to + 50°C
	Humidity	20 to 80%
Storage conditions	Temperature	-10 to + 60°C
	Humidity	20 à 80%
Dimensions	Model A	H 270 x W 185 x D 350 mm
	Model B	H 302 x W 220 x D 385 mm
Weight		10 kg
Internal power supply for electrovalves		24 VDC or 24 VAC 250 mA
Internal diameter for cooling hoses		10 mm
Power cable section	Model A	16 mm ² max. - 10 mm ² min.
	Model B	25 mm ²
Cooling water flow		4 l/mm

NB : The weld timer is designed to operate in an industrial area ; to operate in a residential area, it's necessary to add an EMC filter.

ACCESSORIES AND OPTIONS

- Remote kit (Weld stop + Squeeze without weld selector + Program selector)
- Front window with key lock
- Side mounting kit
- Souriau cable (3 m long) with terminal bar
- EMC filter for use in residential area

ORDERING INFORMATION

Model **A** power supply 400V/50Hz
AR 01-**A**-2 (32 kVA)

Model **A** power supply 230V/50Hz
AR 01-**A**-1 (18 kVA)

Model **B** power supply 400V/50Hz
AR 01-**B**-2 (56 kVA)

Model **B** power supply 230V/50Hz
AR 01-**B**-1 (32 kVA)



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